CLAIMS

1. Energy generating system using sea waves, which includes at least one floating body (1), a ballast (2), a ballast chain or cable (3), at least one connecting cable or chain (4) between said ballast chain or cable (3) and said floating body (1), means for converting the movement of said floating body (1) into mechanical energy, at least one recovery device, situated inside said floating body (1) that permits recovery of said cable or chain (4) to its initial position during the descent of the wave, at least one device for converting said mechanical energy into energy other than mechanical energy, situated inside said floating body (1), and means for transmitting said energy to dry land or to a fixed structure, **characterised** in that said floating body (1) is mounted on a structure (5), in that it includes at least one horizontal shaft (9) integral by its ends to said structure (5), and in that said means for converting the movement of said floating body (1) into mechanical energy include a moving housing (10) around which the connecting cable or chain (4) winds, with said housing (10) being mounted in rotating fashion in relation to said horizontal shaft (9), in such a way that it rotates under the action of said wound cable or chain (4).

2. Energy generating system according to Claim 1, characterised in that said at least one device for converting the mechanical energy includes an electrical generator (15) and means for transmitting said mechanical energy to said generator (15).

3. Energy generating system according to Claim 2, characterised in that said means of transmitting said mechanical energy to said generator (15) include an

interior crown gear (12) attached so as to form part of the moving housing (10), a pinion (13) that meshes with said crown gear (12) and a multiplier (14) attached to said pinion (13).

4. Energy generating system according to Claim 1, characterised in that it includes at least two floating bodies (1) mounted on said structure (5) and at least two parallel horizontal shafts (9) integral by their ends to said structure (5), with the cables or chains (4) of said floating bodies wound in the opposite direction on the moving housings (10) of the floating bodies (1), in such a way that they rotate in opposite directions to one another due to the action of said wound cables or chains (4).

5. Energy generating system according to Claim 1, characterised in that said recovery device includes a coil spring (11), said spring (11) being attached by one of its ends to the horizontal shaft (9) integral to the structure (5) and by another of its ends to the moving housing (10) of said floating body (1).

6. Energy generating system according to Claim 1, characterised in that said structure (5) includes at least one profile parallel to said at least one horizontal shaft (9) and means for cleaning off the marine incrustations on the outer face of said moving housing (10), attached to said profile and to said structure (5).

7. Energy generating system according to Claim 6, characterised in that said means for cleaning off the incrustations are scrapers.

8. Energy generating system according to Claim 1, characterised in that it includes at least one

intermediate buoy (7) attached to said ballast chain or cable (3).

9. Energy generating system according to Claim 1, characterised in that it includes a plurality of modules (17), each of them formed of at least one floating body (1).

10. Energy generating system according to Claims 8 and 9, characterised in that each module (17) is formed by at least said floating body (1) and by at least said intermediate buoy (7) attached to said ballast chain or cable (3).

11. Energy generating system according to Claims 1 or 6, characterised in that said structure (5) includes means for guiding said connecting cable or chain (4).